

**Abstract**

In connection with a classification system for classifying media entities that merges perceptual classification techniques and digital signal processing classification techniques for improved classification of media entities, a system and methods are provided for automatically classifying and characterizing sonic properties of media entities. Such a system and methods may be useful for the indexing of a database or other storage collection of media entities, such as media entities that are audio files, or have portions that are audio files. The methods also help to determine media entities that have similar sonic properties by utilizing classification chain techniques that test distances between media entities in terms of their properties. For example, a neighborhood of songs may be determined within which each song has similar sonic properties.